Habitat.—Fresh water, apparently only upon aquatic plants. The colonies may include from 2 to about 200 zooids, which assume a nodding or pendant position after contracting. The species described was found in an aquarium in the writer's laboratory at the Central High School, first growing upon *Sagittaria platyphylla* Smith, but readily attaching itself to *Elodea, Myriophyllum,* and other aquatic plants. Its food consists for the most part of unicellular Algæ although Protozoa were sometimes observed in process of digestion. The species is very prolific, and while it does not grow in a hay infusion, quickly covers the walls of aquaria, growing thickest on the sides nearest the light. It is apparently of great longevity. This form I have respectfully dedicated to Dr. A. B. Wallgren, Professor of Zoology, University of Pittsburgh.

EXPLANATION OF FIGURES

PL. XIX.

Fig. 1. Entire colony x about 90.
a, b, c, d. Successive positions assumed by zooids during acquisition of food.
e. Curious introverted position noted.

Fig. 2. Two zooids x about 400.
f. Expanded, taking in food.
g. Contracted.
h. Attached bacterial growth.

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A METHOD OF MAKING TOTO MOUNTS OF UNICELLULAR FORMS

The matter of making toto mounts of unicellular forms often presents considerable difficulty. The cells or cœnobia settle so slowly that there is danger of losing them in the changes of liquid, and this slowness in settling makes the use of the more precise stains difficult. A method which has been successfully used for small forms like *Scenedesmus* is described in Chamberlain's "Methods in Plant Histology," University of Chicago Press, 1915. It consists of drying the cells down on the slide and then carrying them through all subsequent processes on the slide as in the case of paraffin sections. This method seems to cause some distortion

even in the smaller forms and a large form like *Closterium* is ruined. The following method, discovered in the botanical laboratories at the University of Nebraska, has been found to combine the good fixation and preservation of the bulk method with the precision of staining and the ease of handling secured by drying the cells to the slide.

The material is killed and fixed in whatever solution the investigator has found most satisfactory for the particular group of algæ or Protozoa with which he is working. It is washed in bulk in the usual manner and carried through a graded series of alcohols until a strength of about sixty per cent. is reached. It is allowed to settle completely in this grade. A very thin layer of albumen fixative is smeared upon the thoroughly cleaned slides. A drop of the material is then drawn up with a pipette and placed upon the slide. The sixty per cent. alcohol in which it is lying coagulates the albumen and causes a surprisingly large number of cells to be firmly fixed to the slide. They may now be dipped directly into sixty per cent. alcohol and successively into higher grades. It is possible to use such stains as Flemming's triple and iron-alum hæmatoxlin rapidly and with precision. Before using a stain like Flemming's triple it is usually well to harden the cells thoroughly in ninety-five per cent alcohol, and then proceed as usual.

Univ. of Nebraska. ROBERT A. NESBIT.

METHOD TO CLEAN USED MICROSCOPIC SLIDES

Especially where a course is given in microscopic technic there are usually a large number of worthless slides prepared. To throw them away seems an extravagance and yet to clean them in waste-xylol is practically a waste of time.

The method I am about to suggest may be well known, yet I think it will bear repeating. There had been a large number of old slides collecting from year to year in our department, worthless and merely occupying space, yet no one cared to assume the responsibility of throwing them away. Recently Professor Reese head of the department, suggested we try gold dust in an attempt to clean them.